REMARKS

Claims 8-11 and 33-51 are currently pending in the subject application and are presently under consideration. Claims 52-58 have been added herein. Claims 8-11 are allowed. Applicant's representative notes with appreciation the Examiner's indication that claims 39 and 40 would be allowed if rewritten in independent form. To this end, an independent claim has been added to comport with the Examiner's indication, and as such, this claim (and those that depend there from) is now believed to be in condition for allowance. A version of all pending claims is found at pages 2-9. Favorable consideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 33-38 Under 35 U.S.C. §103(a)

Claims 33-38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Udd *et al.* (US 4,471,659). It is respectfully submitted that this rejection be withdrawn for at least the following reasons. Udd *et al.* does not teach or suggest all limitations of applicant's invention as claimed.

> To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Independent claim 33 recites "a processor that ***analyzes an amount of light*** received by the light receiver ***to determine the particular vibration state.***" More particularly, the present invention "determines vibration magnitude by computing a largest amplitude of a vibration signal over a sample period. The frequency of vibration is determined by computing changes in

amplitude over the sample period." (page 24, ll. 13-19, for example). Thus, the processor of the present invention is ***analyzing the amount of light received by the light receiver to determine a particular vibration state.***

As conceded in the Office Action, "Udd [*et al.*] ***does not*** expressly show a processor that ***analyzes an amount of light received to determine the particular vibration state***" as in applicant's claimed invention (Office Action, page 3). However, the Office Action contends that "Udd [*et al.*] ... teaches that with quadrature detection, a wide range of vibration frequencies and amplitude[s] is determined." (*Id.*) Applicant's representative avers to the contrary - it is submitted that the Examiner has misconstrued what is disclosed and/or suggested by this cited reference. Rather, Udd *et al.* teaches that quadrature "allows the detection of the vibration over a wide range of frequencies and amplitudes." (*See* Abstract). Nowhere does Udd *et al.* teach or suggest that vibration frequencies and amplitudes can be determined with quadrature detection. Thus, counter to the Examiner's assertion, it would not be obvious to one of ordinary skill in the art that a processor that determines quadrature also determines a particular vibration state.

In addition, the Office Action contends that "[e]ach curve [depicted in Figure 4 of Udd *et al*] represents the intensity (amount) of light measured by each sensor." (Office Action, page 6) The Examiner further contends that these signals are sent to the processor to compare the signals "so a wide range of vibration frequencies and amplitude[s] is determined whereas, in the prior art method, only one sensor is used to measure the amount of light (intensity) received by the sensor." (Office Action, page 6). Applicant's representative respectfully submits that the Examiner is incorrectly using the terms "amount" and "intensity" interchangeably to improperly reject independent claim 33 which recites "***analyzing an amount of light received***". "Amount" is defined as: "**1.** The total of two or more quantities; the aggregate. **2.** A number; a sum. ... **5.** Quantity." (The American Heritage College Dictionary page 47 (4th ed. 2004). While "intensity" is defined as: "**1.** Exceptionally great concentration, power, or force." (*Id.* at 721). Thus, the terms "amount" and "intensity" have clearly distinct meanings and it is improper to use these terms interchangeably.

Udd *et al.* clearly makes the distinction that the "intensity" of the output beam is used. For example, "[t]he ***intensity of the output beam*** 40 versus the relative positions of the gratings 24 and 26 is shown in FIG. 2." (column 2, lines 37-39) and "[t]he ***intensity of the beams*** 92 and

94 with respect to the relative positions of the floating grating 70 and the fixed gratings 88 and 90 is shown in FIG. 4." (column 3, lines 32-35). Therefore, Udd *et al.* does not make obvious applicant's invention as recited in claim 33 which recites "analyzing ***an amount of light*** received by the light receiver to determine the particular vibration state."

In view of the foregoing, it is readily apparent that Udd *et al.* does not teach or suggest applicant's invention as recited in the subject claims. Therefore, this rejection should be withdrawn.

II. Rejection of Claims 41-51 Under 35 U.S.C. §103(a)

Claims 41-51 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Udd *et al.* It is respectfully submitted that this rejection be withdrawn for at least the following reasons.

Independent claims 42, 49 and 51 recite similar claim limitations that relate to ***analyzing an amount of light or remaining light in connection with determining vibration***. As noted *supra* with respect to independent claim 33, Udd *et al.* does not teach or suggest analyzing an amount of light received to determine vibration as in the claimed invention. Therefore, the rejection of these independent claims and claims 43-48, and 50 which respectively depend there from as well as claim 41 (which depends from independent claim 33) should be withdrawn.

Conclusion

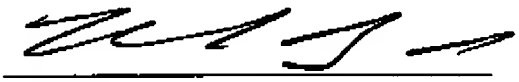
The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

AMIN & TUROCY, LLP



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